PREDICT Semi-Annual Report Y3 (October 2016 – March 2017)

VIET NAM

The Viet Nam National Institute of Hygiene and Epidemiology (NIHE), the Ministry of Health's lead public health institution, is now an official PREDICT partner in Viet Nam. The Ministry of Health approved NIHE's role in the PREDICT project in November 2016. On March 23, 2017, PREDICT and NIHE gathered representatives from the hospitals, provincial Departments of Health, and provincial Preventive Medicine Centers, who will be involved in PREDICT biological surveillance implementation in human populations. The workshop included consultation with these key stakeholders regarding the details of the project work plan and clarification of mechanisms of cooperation. Representatives from FAO and the US CDC also attended the meetings. The PREDICT One Health approach and the importance of triangulated surveillance to characterize viral spillover and sharing was highlighted at the meeting. The goals of PREDICT were enthusiastically endorsed by all stakeholders present, and the multiple agencies represented confirmed their commitment to working collaboratively to address zoonotic disease emergence and pandemic threats.

Photo 1 (NIHE March Workshop): Participants at the PREDICT human surveillance coordination meeting at the Viet Nam National Institute of Hygiene and Epidemiology in Hanoi on March 23, 2017. Photo credit: NIHE

VIET NAM

Pangolins are the most trafficked mammal in the world and PREDICT wildlife trade animal value chain surveillance in Viet Nam has focused on collecting specimens from pangolins confiscated from the illegal trade to understand the potential for viral presence and spillover at this important wildlife/human interface. Between October 2016, and March 2017, PREDICT collected a total of 372 specimens, including 142 oral swabs, 148 rectal swab/fecal samples, 10 serum/blood samples, 2 urine samples and 70 tissue samples from 87 individual pangolins. To date PREDICT Viet Nam has collected samples from 176 individual pangolins confiscated from the illegal wildlife trade. PCR viral family level screening for Flavi-, Paramyxo-, Corona, Influenza-, Filoviridae has been completed for 76 samples from 88 animals at the PREDICT partner laboratory at the Viet Nam National University of Agriculture. PREDICT Viet Nam has also contributed to the development of the PREDICT Pangolin Sampling Guide which will be an important resource supporting the safe handling of wildlife and zoonotic disease investigations across the globe.

Photo 1 (pangolin sampling): PREDICT staff in Viet Nam preparing to collect oral swabs from a juvenile Sunda pangolin (*Manis javanica*) confiscated from the illegal wildlife trade. Photo credit: WCS Viet Nam

Photo 2 (pangolin sampling): Establishing and recording the PREDICT individual identification number for a Sunda pangolin (*Manis javanica*) confiscated from the illegal wildlife trade. The pangolin has been anesthetized for PREDICT sampling. Photo credit: WCS Viet Nam

MONGOLIA

PREDICT has launched influenza surveillance in wild birds in Mongolia after a three year gap in global efforts to collect samples from wild birds for influenza virus detection and sequencing at this important stopover country in Asia's migratory bird flyways. PREDICT Mongolia completed the first sampling year in October 2016, with the collection of samples from 1,195 individual wild birds at surveillance sites in Central, Western, and Eastern Mongolia. PREDICT PCR protocols for viral family level screening were established at the Mongolian State Central Veterinary Laboratory (SCVL) with 1, 212 tests performed between October 2016, and March 2017.

Photo 1 (PREDICT SCVL Laboratory Mongolia):

Photo 2 (PREDICT wild bird surveillance):